

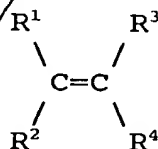
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IN THE CLAIMS

Please add the following new Claims:

Sol C3
--21. The process of Claim 1, wherein at least one of said monomers are of the formula:



a6
wherein at least one of R¹, R², R³ and R⁴ are selected from the group consisting of halogen and YC(=Y)R⁸; where Y may be NR⁸ or O, and R⁸ is H, straight or branched C₁-C₂₀ alkyl or aryl; and

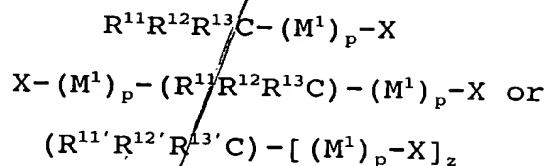
said process further comprises a second polymerizing step conducted prior to said isolating step, conducted in the presence of said transition metal compound and said ligand.

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~~22~~. The process of Claim *15* ~~21~~, wherein at least one of R¹, R², R³ and R⁴ are chlorine or bromine.

23. A graft copolymer prepared by the process of Claim 21.

C
24. A hyperbranched or dendritic copolymer prepared by the process of Claim 1.

25. A homopolymer of the formula:



wherein:

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a
cmt
X is selected from the group consisting of Cl, Br, I, OR¹⁰, SR¹⁴, SeR¹⁴, O-N(R¹⁴)₂, S-C(=S)N(R¹⁴)₂, H, OH, N₃, NH₂, COOH and CONH₂, where

R¹⁰ is alkyl of from 1 to 20 carbon atoms in which each of the hydrogen atoms may be independently replaced by halide, R¹⁴ is aryl or a straight or branched C₁-C₂₀ alkyl group, and where an N(R¹⁴)₂ group is present, the two R¹⁴ groups may be joined to form a 5- or 6-membered heterocyclic ring,

R¹¹, R¹² and R¹³ are each independently selected from the group consisting of H, halogen, C₁-C₂₀ alkyl, C₃-C₈ cycloalkyl, C(=Y)R⁵, C(=Y)NR⁶R⁷, COCl, OH, CN, C₂-C₂₀ alkenyl, C₂-C₂₀ alkynyl oxiranyl, glycidyl, aryl, heterocyclyl, aralkyl, aralkenyl, C₁-C₆ alkyl in which from 1 to all of the hydrogen atoms are replaced with halogen and C₁-C₆ alkyl substituted with from 1 to 3 substituents selected from the group consisting of C₁-C₄ alkoxy,

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aryl, heterocyclyl, $C(=Y)R^5$, $C(=Y)NR^6R^7$, oxiranyl and glycidyl,
where

R^5 is alkyl of from 1 to 20 carbon atoms, alkoxy of
from 1 to 20 carbon atoms, aryloxy or heterocycliloxy; and

R^6 and R^7 are independently H or alkyl of from 1 to 20
carbon atoms, or R^6 and R^7 may be joined together to form an
alkylene group of from 2 to 5 carbon atoms, thus forming a
3- to 6-membered ring,

such that no more than two of R^{11} , R^{12} and R^{13} are H,

M^1 is a radically polymerizable monomer,

p is independently selected such that the number average
molecular weight of the homopolymer is from 1,000 to 1,000,000
g/mol; and

$R^{11'}$, $R^{12'}$ and $R^{13'}$ are the same as R^{11} , R^{12} and R^{13} with the
proviso that $R^{11'}$, $R^{12'}$ and $R^{13'}$ combined contain from 2 to 5 X
groups, where X is as defined above; and

z is from 3 to 6.--

IN THE ABSTRACT

Line 17, after "star,", insert --graft, hyperbranched,
dendritic--.